

# MISSOURI DEPARTMENT OF NATURAL RESOURCES OUTREACH AND ASSISTANCE CENTER

Environmental Assistance Office 3/2004

### MISSOURI WATER POLLUTION PREVENTION SURVEY

### What is the Missouri Water Pollution Prevention Survey?

The Missouri Water Pollution Prevention Survey (MWPP) is a self-evaluation for periodic use by sewer utilities. This is a tool for doing the evaluation. The survey will help identify system strengths and weaknesses. This information can be used to plan system improvements or upgrades, and operational or financial changes. These improvements will help systems maintain compliance with their National Pollutant Discharge Elimination System (NPDES) discharge permit.

The survey is divided into five sections:

The <u>Wastewater Utility Systems</u> section identifies the various components of a utility system and addresses operation and maintenance issues.

The <u>Loading / Capacity</u> section examines the hydraulic and organic loads on the system, compares the loading to design capacity, and looks at the treatment efficiency of the system.

The <u>Sludge and Biosolids-Disposal and Reuse</u> section identifies the sludge management systems and evaluates adherence to "503" sludge regulations.

The <u>Sewer Use</u> section evaluates the sewer use ordinance and the effects of local commercial and industrial facilities on the wastewater treatment system.

The <u>Management and Financial Capacity</u> section examines the ability of the management and financial systems to provide for the long-term viability of the utility.

The MWPP Survey is available in three forms:

- Obtain a paper form from the department's Environmental Assistance Office.
- Access the MWPP Survey in PDF format at the department's Web site and print it on paper yourself at: <a href="www.dnr.mo.gov/oac/pubs.htm">www.dnr.mo.gov/oac/pubs.htm</a>.
- Download the MWPP Survey template from the department's Web site and complete
  the survey electronically (<u>www.dnr.mo.gov/oac/emiapps.htm</u>) <u>download the EMI
  Software</u>.

i

To complete the MWPP Survey electronically, follow these steps:

- Download the files (files will be placed on the computer's C: drive in a subdirectory called EMI).
- Open the file MWPPTemp (template version) in Word.
- Save the form under a new name (this will give users an original blank template if needed).
- Enter information in highlighted blanks. Mark check boxes by clicking on them. Calculations are performed automatically as the required figures are input.
- To move from field to field, use the arrow keys or the tab key.
- To move to a particular page, use the right scroll bar or the mouse scroll wheel.

The form is a template. To modify the form to fit special needs of a system, refer to the instructions for customization at the end of the survey.

### What resources are needed to complete the survey?

- NPDES permit
- Discharge monitoring reports
- Operations and maintenance manual
- Utility financial reports
- Internet connection to access and print the PDF form or download the Word template if desired
- MS Word to use in the template form electronically

# What if a system has more than one treatment facility?

The MWPP Survey form covers one treatment facility. If a system has additional wastewater treatment facilities, fill out the form "Additional Facilities- MWPP Survey" for each one. Those filling out the form electronically should open the file MWPPAdd, located on the C: drive in the EMI subdirectory.

# Is participation in the MWPP Survey Program mandatory?

**No! Participation in the MWPP survey is voluntary.** The department developed the MWPP Survey as a tool for systems to use to assess their technical, managerial, and financial capacity. It will give systems a snapshot of their health, and that is reason enough to use the tool.

However, Missouri State Regulation 10 CSR 20-9 (7) gives systems some incentive to complete and return the form. Systems that have participated in the survey for the previous five consecutive years will receive additional "conference and conciliation" communications and penalty reductions if they have compliance problems. In essence, completing the form regularly is a demonstration of a system's intent to manage its wastewater systems properly, and the department wants to recognize that.

To receive credit for participating in the program, mail a copy of the completed survey to:

Department of Natural Resources Environmental Assistance Office P.O. Box 176 Jefferson City, MO 65102-0176

Those who complete the survey in Word, should print a copy of the completed form and mail it in or e-mail an electronic copy as a Word document attachment to: <a href="mailto:oac@dnr.mo.gov">oac@dnr.mo.gov</a>.

# Questions about the survey?

Call the Environmental Assistance Office (EAO) at 1-800-361-4827 or (573) 526-6627, or email the department. EAO staff will be glad to help system managers assess and build their system's capacity.

Thank You for Participating

In the MWPP Survey!

# MISSOURI WATER POLLUTION PREVENTION SURVEY

# **SYSTEM IDENTIFICATION**

Today's Date: 03/25/04

City, District or Company Name	Evaluation Period (month/year to month/year)
	То
Mailing Address	Phone Number
Contact Person	Title
Mailing Address (if different)	Phone Number (if different)
Primary System	Permit Number
Wastewater Treatment Facility Name	
	MO-
Additional Systems  2 <sup>nd</sup> Wastewater Treatment Facility Name	Permit Number
	MO-
3 <sup>rd</sup> Wastewater Treatment Facility Name	Permit Number
	MO-
4 <sup>th</sup> Wastewater Treatment Facility Name	Permit Number
	MO-

1

# I. WASTEWATER TREATMENT PROCESSES

Check the boxes that best describe this wastewater treatment system:

<b>Preliminary Treatment Systems:</b>
Bar Screen Grit Channel Comminutor Othe
Primary Treatment Systems:
Primary Clarifier Other
Secondary Treatment Systems:
Lagoon:
Number of Cells Mechanical Aeration
Fixed Film:
Trickling Filter Rotating Biological Contact Sand Filter
Activated Sludge:
Package Plant Contact Stabilization Oxidation Ditch
Sequential Batch Reactor Extended Aeration Other
Advanced or Tertiary Treatment Systems:
Description
Disinfection Systems:
Chlorine Ultraviolet Ozone Other
Effluent - Stream Discharge:
Continuous Discharge Controlled Discharge No-discharg
Effluent - Land Application:
Overland Flow Irrigation System Wetlands

II. <u>SLUDGE TREATMENT SYSTEMS</u>Check the boxes of the components that make up your sludge treatment system.

Sludge treatment:
Wastewater Lagoon Anaerobic Digester Aerobic Digester
Lime Stabilization Composting Air or Heat Drying
Storage Tank Other
Sludge Storage Facilities:
Holding Tank Basin Concrete Pad Building
Other
III. WASTEWATER SYSTEM DESIGN LIFE/CONDITION
The original construction was completed in
Upgrades/expansions to the system were completed in
The stated design life of the system is years.
The anticipated remaining useful life of the system is years.
We anticipate that upgrades to the system will be needed to meet new federal or state discharge limitations.
The general condition of our wastewater treatment system is:
Excellent Good Fair Poor
Treatment Systems Operations Checklist:
The operation and maintenance manual is available on site.
The system has adequate laboratory equipment for process control.
The system has adequate laboratory equipment for regulatory testing or contracts for this service.
The system has a safety program, procedures and equipment in place.
The system has a preventive/predictive maintenance program in place.

	The system has spare parts and equipment available for emergencies.			
	The system keeps accurate operations and maintenance records.			
	Facilities that store large quantities of chlorine, ammonia, anhydrous sulfur dioxide, or methane:			
	The facility has notified the Local Emergency Planning Commission (LEPC) and Missouri Emergency Response Commission (MERC) by filing MERC Tier II forms with each agency.			
	Facilities that store more than threshold quantities of these chemicals:			
	The facility has a risk management plan in place.			
IV. <u>COLLEC</u>	CTION SYSTEM			
The system ha	miles of collection sewers.			
Check the box	xes of components that make up the collection system.			
	Gravity Sewers: % of system.			
	Combined storm and sanitary sewers: % of system.			
	Pressure Sewers/Grinder Pump: % of system.			
	Pressure Sewers/Septic Tank Effluent Pumps: % of system.			
	Small Diameter Gravity Sewers: % of system.			
	Vacuum Sewers: % of system.			
	Flat Grade/Simplified Sewers: % of system.			
The oldest par	rt of the collection system is years old.			
The oldest pa	rt is % of the total collection system.			
% of th	ne collection system was repaired, replaced or rehabilitated last year.			
The system ha	as <u>lift stations.</u>			
In the last yea in dry weathe	r, the collection system bypassed days during wet weather and days r.			

Inflow	and In	filtration (I&I) in the collection system is:
		High (causes repeated bypasses or stresses the capacity of the treatment plant)
		Medium
		Low (seldom causes the system any difficulties)
Collec	ction Sy	stem Operations Checklist:
		The system maintains accurate maps of the collection system, and they are readily available to the maintenance staff.
		The system performs routine inspection and maintenance.
		The system keeps accurate, detailed maintenance records.
		The system has procedures for handling stoppages and citizen complaints.
		The system has emergency pumping and repair equipment on hand.
		The system requires building connection permits and inspection of installations before new connections can be made.
V. <u>OP</u>	PERATI	IONS / STAFFING
Check	the box	xes that apply to the system.
	Staff h	nandles the operation and maintenance of our wastewater systems.
	Operat	tion and maintenance work is contracted to
	Staff d	loes laboratory analysis in an on-site laboratory.
	Labora	atory analysis work is contracted to
The sy	stem's	operating permit states that the wastewater treatment plant is classified at the
	□ A	B C D certification level.
Staffin	ng Cheo	eklist:
		The wastewater utility is adequately staffed.
		The plant supervisors are all certified at the wastewater plant certification level.
		The wastewater operators are all certified at a minimum of level D.

The operators receive at least 30 hours of approved certificate renewal training every three years.
The system pays our operators for time spent attending training.
The system pays the renewal training costs for the operators.
The system pays professional organization membership dues for the wastewater operators.

### LOADING / CAPACITY

If the organic or hydraulic loading of this facility consistently exceeds 90 percent of its design capacity, it may have trouble meeting discharge limits. This section looks at loading, capacity, effluent quality and the effects of future growth on this facility.

Table 1

HYDRAULIC LOADING Flow Measured On: Influent Effluent Flow not measured			ORGANIC LOADING (Influent)		
1	2	3	4	5	6
Month	No. of Bypasses during Month	Highest Peak Reading on Flowmeter (MGD)	Average Daily Flow (MGD)	Average BOD (mg/L)	Average Daily Organic Loading (col.4 x col. 5 x 8.34) = lb./day
Jan					0
Feb					0
Mar*					0
Apr					0
May					0
Jun*					0
Jul					0
Aug					0
Sep*					0
Oct					0
Nov					0
Dec*					0

<sup>\*</sup> Lagoons – if tested quarterly, input quarterly #s at Mar, June, Sep, and Dec.

### **Definitions:**

**Bypass** - any release or discharge from the plant that is untreated or only partially treated.

**Highest Peak Flow** - the highest daylong flow recorded in each month.

**Average Daily Flow** - the average of all daily flows for each month.

**Average Biochemical Oxygen Demand (BOD)** - the average of all influent samples for each month (concentrations, not mass or flow weighted).

### I. FACILITY DESIGN CAPACITIES

(This section uses the information found in Table 1 on the previous page. Design information can be found in the system's O&M manual or in the design specifications.)

The design average hydraulic capacity of the system is MGD. Ninety percent of the design hydraulic capacity is 0.00 MGD. The average daily flow (Table 1 col. 4) exceeded 90 percent of the design hydraulic capacity times last year. The peak hydraulic capacity of the system is MGD. The highest peak flow (Table 1 col. 3) exceeded the peak hydraulic capacity of the system times last year. The design average organic capacity of the system is BOD lbs./day. Ninety percent of the design average organic capacity is 0 BOD lbs./day. The average daily organic loading (Table 1 col. 6) exceeded 90 percent of the design average organic capacity \_\_\_\_\_ times last year. There were bypasses (Table 1 col. 2) due to storm water last year. There were bypasses (column 2) due to equipment failure last year. The treatment facility has significant seasonal fluctuations in loading due to population or water use variations (e.g., students, tourism, institutional populations, industrial water use variations, migrant workers, part-year residents).

8

Table 2

	EFFLUENT QUALITY	
Month	BOD (mg/L) Monthly Average	NFR (TSS) (mg/L) Monthly Average
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		
Permit Limits		
No. of Times Over Limit		

Table 3

	OTHER PERMITTED CONSTITUENTS				
Constituent		No. of Times Permit Limit was Exceeded			No. of Times Permit Limit was Exceeded
	Fecal Coliform			Ammonia	
	Chlorine			рН	
	Metals			Organics	
	Whole Effluent Toxicity			Other	

# II. GROWTH AND EXPANSION

Check those b	poxes that apply to the facility.
The design po	pulation equivalent for the system is
The current po	opulation equivalent served by the system is estimated to be
Over the next	five years, the population of the community served by this system is expected to:
	Grow significantly.
	Remain about the same.
	Decline significantly.
Over the next	five years, it is anticipated that the community will:
	Extend sewer service to previously unsewered areas of the community.
	See significant new residential development.
	See significant new commercial development.
	See a significant decrease in commercial facilities.
	See significant new industrial development.
	See a significant decrease in industrial operations.
It is believed	that these changes will:
	Not require any operational or physical changes to the treatment facility.
	Require operational changes at the treatment facility.
	Require a treatment facility upgrade.
	Require a treatment facility expansion.

# SLUDGE / BIOSOLIDS - DISPOSAL / REUSE

Check the bo	exes which apply to the system's sludge handling practices:		
	The sludge is retained in a wastewater treatment lagoon.		
	Money is set aside in the budget for future sludge removal costs.  (Skip to the <b>Sewer Use</b> - page 13 if no sludge was removed this year)		
	The sludge is hauled to another permitted treatment facility.		
	A permitted contract hauler hauls and disposes of the sludge.		
	The sludge is hauled to a permitted incineration facility.		
	The dried sludge is hauled to a permitted landfill.		
	The sludge is disposed of in a permitted sludge storage lagoon.		
	Biosolids are land applied.		
Appr	oximately dry tons of sludge were reused or disposed of last year. $dry tons = (\# \text{ gallons } x \% \text{ total solids}) \div 24,000$		
Sludge/Bios	olids Checklist:		
	A copy of Standard Conditions for NPDES Permits Part III - Sludge & Biosolids from Domestic Wastewater Treatment Systems and a set of Water Quality Guides are available on-site for reference.		
	An Annual Form S Sludge Report is filed with the department regional office (due Jan. 28 each year) with a copy sent to EPA Region 7 (major facilities only). (Note: wastewater lagoons are only required to report when sludge is removed or the lagoon is closed.)		
	Adequate sludge/biosolids storage capacity is available for the time periods when land application or transportation to a disposal facility are not.		
	Records of the sludge/biosolids removed from our facility are kept. The records include:		
	Date, percent solids, the number of gallons of sludge disposed and the method of disposal.		
	Name, address, phone number and permit number of any facility or hauler receiving sludge.		
	Records are kept for at least five years.		

11

<b>Land Applica</b>	ation Systems Checklist:		
	The system's biosolids meet "503" Class A, or Class B pathogen requirements.		
	The system's biosolids meet "503" vector attraction requirements.		
	The processes used to meet the pathogen and vector attraction requirements are documented.		
	The metals content of the biosolids are tested and documented.		
	The soil at the land application sites is tested at least once every five years. The testing includes pH, Cation Exchange Capacity (CEC), and phosphorus.		
	Adequate land application sites are available to handle biosolids if one of the application sites becomes unavailable.		
	Best management practices are followed when biosolids are land applied.		
	"Good neighbor" practices are followed when biosolids are land applied on farmers' private lands.		
	Land application site records include:		
	Name and address of the landowner.		
	Location of the site including a legal description.		
	Crops grown on the site.		
	Number of dry tons/year of biosolids applied to the site.		
	Plant Available Nitrogen (PAN) applied in lbs./acre/year if the biosolids application rate exceeds 2 dry tons/acre/year.		
	Metals applied in lbs./acre/year and the cumulative pollutant loading if the biosolids exceeded the "low metals" criteria.		
	Adequate equipment for the land application program is available.		
The ge	general condition of the equipment is:		
	Excellent Good Poor		
	The system contracts for land application services.		

### **SEWER USE**

# I. <u>SEWER USE ORDINANCE</u> A sewer-use ordinance is in place. The sewer-use ordinance prohibits the discharge of wastes to the sewer system that: Could cause a fire. Could cause an explosion. Could cause corrosive structural damage. Could obstruct the flow of sewage through the system. Have a pH less than 5. Have a temperature greater than 104°F. The sewer-use ordinance prohibits or regulates the introduction of toxic wastes into the sewer system. The sewer-use ordinance prohibits or regulates the introduction of excessive amounts of high-strength oxygen-demanding wastes into the sewer system. II. COMMERCIAL AND INDUSTRIAL USE Industries or commercial users that discharge more than 25,000 gallons per day of process water or that account for more than five percent of the system's average daily flow are identified. New industries being established in our community are identified. Existing industries that are planning significant expansions or adding new processes are identified.

It has been determined if any of these industries are subject to regulation under federal

A procedure is in place to evaluate any industrial or commercial discharge to the sewer

system that causes operational problems or effluent discharge violations.

MO 780-1559 (3-04)

pretreatment standards.

# III. INDUSTRIAL PRETREATMENT PROGRAM

The coprogra	ommunity served by the system is required to have an industrial pretreatment am.
	Legal authority for the pretreatment program has been established by adopting an ordinance.
	Local discharge limits that meet or exceed EPA's requirements have been established.
	The significant industrial users and categorical industries that are subject to the pretreatment regulations have been identified.
	Permitting and record keeping procedures have been established.
	Adequate funding is available to implement the pretreatment program.

# MANAGEMENT AND FINANCIAL CAPACITY

<i>I.</i> <u>M</u>	<u>IANAGEMENT</u>
	The system has an organizational chart that clearly shows the lines of authority.
	The system has written accounting and audit procedures in place.
	The system has bond insurance for employees who handle system funds.
	The system has written billing procedures and a collection policy in place.
	The system has written purchasing and inventory control procedures in place.
	The system has written job descriptions and selection criteria.
	The system has established internal communications (i.e. newsletter, bulletin board and staff meetings).
	The system has a procedure in place for handling customer complaints.
	The system has a public relations program (includes newsletters, news releases, bill fliers, open house, etc.).
	The system has an emergency plan in place.
II. <u>I</u>	<u>FINANCIAL</u>
	The wastewater utility (or department) is set up as an enterprise fund (budgeted separately from other municipal activities such as water supply, streets and parks).
	The system has a separate reserve account for planned repair and replacement of equipment.
	The system has money budgeted for emergency operation and repair. (A good rule of thumb is to keep enough funds on hand to replace the system's most vulnerable piece of equipment and to pay for 45 days of operation and maintenance.)
	The system receives a monthly report of revenues and expenses.
	This report includes both budget and actual figures.
	The system's reserve accounts are invested in safe, short-term investments.
	The system makes a projection of its future costs and revenues.
	The system has a five-year (or longer) capital improvements plan.

### **Operating Ratio:**

Checking the **operating ratio** every month and comparing it to past values will show the *trend* of the utility's finances. The trend should be steady or upward. If the operating ratio is more than the minimum value required to pay all the bills, and it is holding steady, the utility is probably financially healthy. If the ratio is below the minimum value or falling, the system needs to do something to get back in shape. Think of the operating ratio as the pulse of the utility.

To calculate the operating ratio, divide total revenues by the total operating expenses. Year-to-date financial data is used in the calculations. Year-to-date financial data is the total of the most recent 12 months of financial data. For example, in order to calculate the operating ratio as of June 30, 2000, use the financial data from July 1, 1999, through June 30, 2000.

<b>Total Revenues</b> year-to-date are \$ (Includes user charge fees, penalty payments, impact fees, hookup fees, tax assessments, interest income and any other revenue.)
<b>Total Operating Expenses</b> year-to-date are \$ (Includes administration, wages, benefits, taxes, insurance, utilities, chemicals, supplies, professional services, reserve account deposits, existing principal and interest payments and any other expenses.)
Operating Ratio = Total Revenue = Total Operating Expenses  (The bare minimum operating ratio for a self-sustaining system is 1.00. If less, then step should be taken to balance the system's expenses and revenues immediately. The operating ratio for most systems should exceed 1.15; small systems may need an operating ratio of 1.50.)
The system's operating ratio is checked monthly and compared it to past values.
Coverage Ratio:

The **Coverage Ratio** measures whether the utility has enough revenue to pay the principal and interest on its loans or bonds. Calculate the **Coverage Ratio** if the system has debt service.

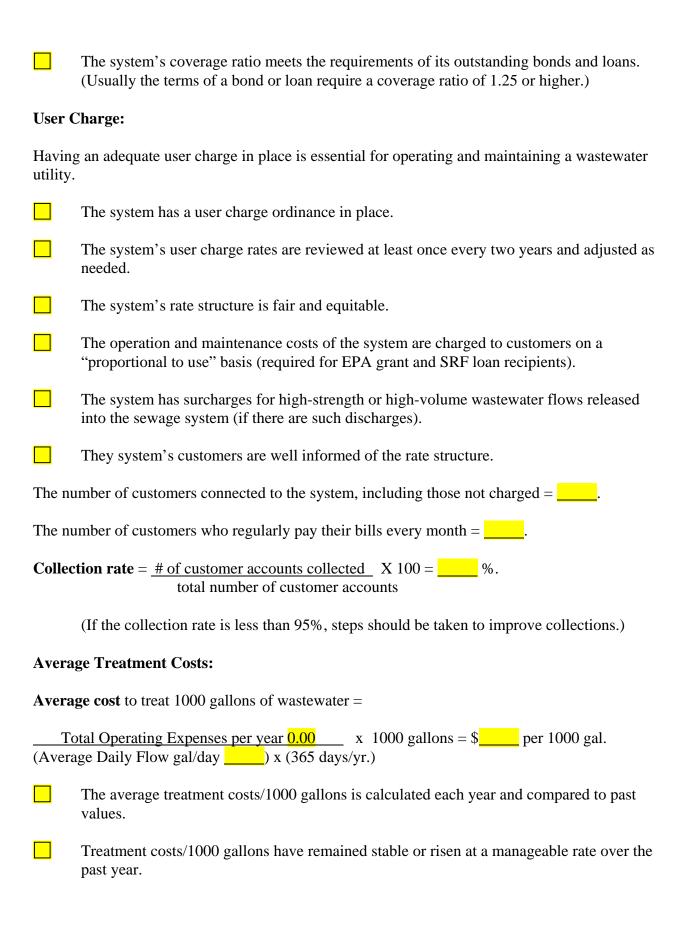
The annual **Debt Service Expenses** (principal & interest) = \$ \_\_\_\_\_.

**Non-Debt Expenses** (Total Operating Expenses - Debt Service Expenses) =  $\$_{\underline{0}}$ .

**Revenue Available for Debt Service** (Total Revenue - Non-Debt Expenses) = \$0

Coverage Ratio = Revenue Available for Debt Service = Debt Service Expenses

The system's coverage ratio is checked at least quarterly and compared it to past values.



#### RESOURCES

### I. <u>TECHNICAL ASSISTANCE</u>

### Department of Natural Resources, Environmental Assistance Office (EAO)

1-800-316-4827 or (573) 526-6627 www.dnr.mo.gov/oac/lgov.htm

 $\sqrt{\mbox{Show-Me}}$  Ratemaker software  $\sqrt{\mbox{Ureatment systems troubleshooting}}$   $\sqrt{\mbox{Operator certification and training information}}$   $\sqrt{\mbox{Sludge management information}}$   $\sqrt{\mbox{Sludge management information}}$   $\sqrt{\mbox{Lagoon closure guidance}}$   $\sqrt{\mbox{Environmental Management Institute for local}}$ 

 $\sqrt{\text{Risk management plans}}$  government officials

### **Department of Natural Resources, Energy Center**

(573) 751-3443

www.dnr.mo.gov/energy/homeec.htm

 $\sqrt{\text{Energy efficiency assistance for electric motors, buildings, operations and processes}}$ 

 $\sqrt{\text{Grants}}$  and loans for energy efficiency projects

# **Department of Natural Resources, Regional Offices and Environmental Programs**

1-800-361-4827 (call EAO for referral)

www.dnr.mo.gov/oac

 $\sqrt{\text{Permitting information}}$   $\sqrt{\text{State Revolving Fund projects coordination}}$ 

 $\sqrt{\text{Enforcement questions}}$   $\sqrt{\text{Pretreatment program questions}}$ 

√ Technical assistance

# **Midwest Assistance Program**

1-800-822-2981 www.map-inc.org

 $\sqrt{\text{Technical assistance}}$   $\sqrt{\text{Environmental system troubleshooting}}$ 

√ Environmental training

### **Missouri Rural Water Association**

(573) 474-6990

www.moruralwater.org

 $\sqrt{\text{Technical assistance}}$   $\sqrt{\text{Environmental system troubleshooting}}$ 

 $\sqrt{\text{Environmental training}}$   $\sqrt{\text{Smoke testing}}$ 

### **Regional Planning Commissions**

Call EAO for phone number of commission that serves the local area. 1-800-361-4827

 $\sqrt{\text{Grant applications}}$   $\sqrt{\text{Grant administration}}$   $\sqrt{\text{Project planning}}$   $\sqrt{\text{Community planning}}$ 

√ Training

### II. TECHNICAL RESOURCES

Product catalogues, online discussion groups, conferences, training and environmental news.

### **National Small Flows Clearing House (NSFC)**

**National Environmental Training Center for Small Communities (NETCSC)** 

P.O. Box 6064

West Virginia University Morgantown, WV 26506-6064 (800) 624-8301 or (304) 293-4149

Fax: (304) 293-3161 www.nsfc.wvu.edu www.netc.wvu.edu

### **Water Environment Federation (WEF)**

601 Wythe Street Alexandria, VA 22314-1994 (800) 666-0206 or (703) 684-2452

Fax: (703) 684-2492

www.wef.org

### **American Public Works Association (APWA)**

2345 Grand Boulevard Suite 500 Kansas City, MO 64108-2641 (816) 472-6100

Fax: (816)472-1610 www.apwa.net

### **Association of Metropolitan Sewerage Agencies**

1000 Connecticut Avenue, NW, Suite 410 Washington D.C. 20036-5302

(202) 833-AMSA Fax: (202) 833-4657

http://amsa-cleanwater.org

# **Customizing the MWPP**

The MWPP form can be electronically customized to fit individual needs and preferences.

When the electronic version of the form is opened, it will be locked. This prevents changes to the form while it is being filled out. To make changes to the form, follow the steps listed below:

- Save the form under a new name. If something goes wrong while working on the form, the original is available to fall back on.
- Open the Forms toolbar. To do this click on View, then click Toolbars, then click Forms
- Unlock the form by clicking the Padlock on the Forms Toolbar.
- Make the desired changes to the form.
- Lock the form by clicking on the Padlock on the Forms Toolbar.
- Save the form.

#### **CAUTION:**

- 1. If the form is changed, it may disturb the automatic calculations it makes.
- 2. Every time the form is locked and unlocked, it will clear all previous data entered in the form fields. If you start entering data and then discover that you must unlock the form, first print out the entire form. You will then have the data in print for easy re-entry later.